

BOOK REVIEWS

ETHAN B. RUSSO and FRANJO GROTENHERMEN (eds.). 2006. **Handbook of Cannabis Therapeutics from Bench to Bedside**. (ISBN 0-7890-3097-7, pbk.). Haworth Press, Inc., 10 Alice Street, Binghamton, New York, NY 13904-1580, U.S.A. (**Orders:** www.haworthpress.com, orders@haworthpress.com, 1-800-429-6784, 607-722-5857). \$39.95, 471 pp., 6" × 8½".

Despite regulatory problems, there has been a lot of research on *Cannabis sativa* and the phytochemical compounds derived from it. Humans produce endocannabinoids that act on cannabinoid receptors 1 and 2 (CB₁ and CB₂). CB₁ receptors are found mainly in the brain, spinal chord, and peripheral nervous system and are associated with the psychoactive properties of *Cannabis sativa*. They are also associated with motor control, memory processing, and pain control, making them targets for drug discovery efforts. CB₂ receptors are found in the immune system and are associated with cytokine release. They are not associated with the psychoactive effects of cannabinoids. This makes the CB₂ receptors the preferred targets for drug discovery efforts, particularly for analgesic, anti-inflammatory, and antineoplastic drugs. The cannabinoid class of phytochemicals includes those with psychoactive effects like Δ⁹-tetrahydrocannabinol, as well as non-psychoactive compounds like cannabidiol. These two phytochemicals and many others derived from *Cannabis sativa* are under investigation by researchers, including the pharmaceutical giant Pfizer, as new drugs to treat conditions including chronic pain, nausea, and other side effects from cancer chemotherapy and radiotherapy, as well as glaucoma, obesity, Parkinson's disease, and schizophrenia.

The *Handbook of Cannabis Therapeutics: From Bench to Bedside* is an informative guide to the world of cannabis research. It begins with historical ethnobotanical studies of ancient Arab and Greek texts. Three chapters are devoted to the pharmacokinetics and pharmacodynamics of the cannabinoids, including synergistic effects. This is followed by two chapters on the endocannabinoids and their receptors. A total of seven chapters are devoted to the medicinal uses of *Cannabis sativa*, including the treatment of nausea from cancer chemotherapy, loss of appetite in AIDS patients, multiple sclerosis, and crack cocaine addiction. The last section of the book is titled "Side Effects." It includes an interesting chapter by a registered nurse on *Cannabis sativa* and harm reduction, including the effect that legalization would have on the duties of health care professionals. The last chapter focuses on the positive and negative consequences of legal *Cannabis sativa* in a clinical setting.

Many of the chapters in this book were originally culled from the *Journal of Cannabis Therapeutics*, which is no longer in existence and hard to obtain. In addition, the book's editors and contributors are experts in the field of cannabis research. Therefore, this book is a useful source of hard-to-find scientifically validated information on *Cannabis sativa* as a medicine, making it a wonderful antidote to the massive amounts of misinformation and rumors about this culturally significant plant.—Marissa N. Oppel, MS, Collections and Research Assistant, Botanical Research Institute of Texas, Fort Worth, TX, 76102-4060, U.S.A.

THOMAS J. ELPPEL. 2006. **Botany in a Day: The Patterns Method of Plant Identification, 5th edition**. (ISBN 1-892784-15-7, pbk.). Hops Press, LLC, 12 Quartz Street, Pony, MT 59747-0697, U.S.A. (**Orders:** www.hopspress.com, www.wildflowers-and-weeds.com, www.mountain-press.com). \$25.00, 221 pp., b/w illustrations, 8½" × 11".

Botany in a Day: The Patterns Method of Plant Identification is an excellent learning tool. It is focused on plants that grow in the northern parts of North America, however it is still useful for those of who live in the southern United States. The first part is a textbook on plant identification. It is intended to be completed in one day, although it took me longer than that. Unlike a field guide, which is a list of individual species, this guidebook is focused on recognizing visual patterns of plant groups. The book is illustrated with copious black-and-white line drawings that are incredibly helpful visual aids. The second part is focused on the edible and medicinal uses of wild plants, including an introduction to phytochemistry. This book is an excellent introduction to plant identification in the field. It has helped me to learn how to identify plants that grow here in North Central Texas.—Marissa N. Oppel, MS, Collections and Research Assistant, Botanical Research Institute of Texas, Fort Worth, TX, 76102-4060, U.S.A.